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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,809	01/08/2002	Steven M. Powell	2802-159-026	2895

7590 12/30/2003

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EXAMINER

BRINSON, PATRICK F

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/040,809

Applicant(s)

POWELL ET AL.

Examiner

Patrick F. Brinson

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) 33-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,11,12,16,17,20-24 and 27 is/are rejected.
- 7) ☒ Claim(s) 2,3,7-10,13-15,18,19,25,26 and 28-32 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 12, 16, 20-23 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by **Higbee**.

The patent to **Higbee** discloses a flexible hose extending in an axial direction along a central longitudinal axis and in a radial direction circumferentially about the longitudinal axis comprising a core tube (12) having a circumferential inner core tube surface and an opposing circumferential outer core tube surface. A first reinforcement layer (14) surrounding the outer core tube surface, wherein the reinforcement layer is formed of at least one filament (22) of a first fiber and at least a second fiber reinforcement layer surrounding the first reinforcement layer, wherein the second reinforcement layer being formed of at least one filament (22) of a second fiber. Fig. 2 discloses the second reinforcement layer being bonded to the first reinforcement layer by a bonding agent, wherein only a portion of the filaments of the first reinforcement layer and of the second reinforcement layer being wetted by the bonding agent, as

recited in claim 1. The first reinforcement layer is spirally wound in a first winding direction, while the second reinforcement layer is spirally wound in a second direction, opposite the winding direction of the first reinforcement layer, as recited in claim 12. Col. 3, lines 12-17 discloses that the first and second fibers are formed from material including nylon, as recited in claim 20.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Higbee** in view of **Chrow**.

The patent to **Higbee** does not disclose the bonding agent as being a thermoplastic resin. The patent to **Chrow** discloses a hose construction including a tube (11) and a reinforcement layers (14) formed of nylon. Col. 2 discloses that the reinforcement layers are bonded by polymeric material (13) formed of a polyester isocyanate adhesive and to the outer cover with an amine cured epoxy.

4. Claims 17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Higbee** in view of **Searfoss et al.**

The patent to **Higbee** does not disclose the inner tube and outer cover formed of multiple layers. The patent to **Searfoss et al.** discloses a hose, fig. 4, including an inner tube comprising an inner core tube layer (15) of a first thermoplastic material and an outermost core tube layer (16) of a second thermoplastic material which defines the outer core tube surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the hose of **Higbee** to have an innermost and outermost core tube layers as suggested by **Searfoss et al.** in order to produce a hose capable of transporting high pressure fluid. Similarly, the cover may be formed of multiple layers.

Allowable Subject Matter

5. Claims 2, 3, 7-10, 13-15, 18, 19, 25, 26 and 28-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Taylor, Haas, and Horvath et al. are pertinent to Applicant's invention in disclosing multi-layer hoses including multiple reinforcement layers and adhesives.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Patrick F. Brinson** whose telephone number is (703) 308-0111. The examiner can normally be reached on M-F 7:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Y. Mar** can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.


Patrick F. Brinson
Primary Examiner
Art Unit 3752

P. F. Brinson
December 23, 2003